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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,973	03/06/2000	CHIHIRO SAKAI	NSG-180US	6982

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RATNER & PRESTIA  
P O BOX 980  
VALLEY FORGE, PA 19482

EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT	PAPER NUMBER
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1755

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DATE MAILED: 05/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/486,973

Applicant(s)

SAKAI ET AL.

Examiner

Michael A Marcheschi

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on amendment filed 1/9/02.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,9 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. **The claim contains new matter for the following 2 reasons.**

(1) The new matter in this claim is the lower limit of 0.075% because the specification never defines this lower limit for all of the possible additives. Although table 5 on page 11 (sample 16) recites this value, this value is only defined for the additive iron nitrate hydrate. In view of this, the specification does not provide reasonable support for this value when the additive is **any other additive other than** iron nitrate hydrate (i.e. when the additive is CoO, etc.).

(2) In addition, the new matter in this claim is the term "about" before both ranges because the specification does not provide support for this. The specification **only** supports the specific limits (i.e. 0.15%) and **not** the tolerance of said limits that about defines ("about" **permits some tolerance**, *In re Ayers*, 154 F 2d 182, 69 USPQ 109).

Claims 1, 3 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either (1) Duncan or (2) Janakirama-Rao.

Duncan teaches in column 3, lines 45-55, a soda-lime glass batch comprising Na<sub>2</sub>SO<sub>4</sub> and an additive which is within the scope of the claimed additives.

Janakirama-Rao teaches in the entire document (specifically claim 11), a soda-lime glass batch comprising  $\text{Na}_2\text{SO}_4$  and an additive which is within the scope of the claimed additives.

The claimed invention is anticipated by the references because said references teach soda-lime glass batches comprising  $\text{Na}_2\text{SO}_4$  and an additive which is within the scope of the claimed additives. In the alternative, no distinction is seen to exist between the references and the claimed invention in the absence of any evidence showing the contrary.

Claim 3 added is to the rejection in view of the new matter added to this claim, which is not being considered for rejection purposes.

Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as obvious over Amrhein et al.

The reference teaches that a portion of the  $\text{Na}_2\text{SO}_4$  in the soda lime glass batch is replaced with a nitrate because this replacement suppresses sulfurous emissions. The amount of replacement would have been obvious to one skilled in the art in order to minimize sulfurous emissions during manufacturing of the glass without compromising the desired composition of the batch material (i.e. the sodium content, etc.). In addition, the reference broadly states that this replacement is made and since no specific percentages are defined, it is the examiners position that since the reference fails to mention any specific replacement rate (criticality), this (the absence of any such limitation) constitutes a broad teaching of replacement rates, as long as a final soda-lime batch is obtained. In view of this, it can be reasonably interpreted that the claimed replacement rate is encompassed by the broad teachings according to this reference in the absence of any evidence showing the contrary (criticality). One skilled in the art would have knowledge of the useable replacement rates in view of the teachings according to this reference.

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The reference states that an inorganic nitrate salt can be used and it is the examiners position that this encompasses any inorganic nitrate salt, including the claimed one, because "a generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)". Although the preferred nitrate is sodium or potassium, "a reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421. Since the nitrate is an alkali nitrate, it is the examiners position that one skilled in the art would have found the use of any alkali nitrate obvious in the absence of any evidence showing the contrary (the substitution of one alkali nitrate for another is obvious and well within the level of ordinary skill in the art). Finally, this reference also teaches that the batch can contain ferric oxide.

Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as obvious over either (1) Duncan in view of Amrhein et al. or (2) Janakirama-Rao in view of Amrhein et al.

It is the examiners position that it would have been obvious to replace a portion of the  $\text{Na}_2\text{SO}_4$  in the batches according to Duncan and Janakirama-Rao because Amrhein et al. teaches that it is well known to replace a portion of the  $\text{Na}_2\text{SO}_4$  in soda lime glass batches with a nitrate in order to suppress sulfurous emissions. The amount of replacement would have been obvious to one skilled in the art in order to minimize sulfurous emissions during manufacturing of the glass without compromising the desired composition of the batch material (i.e. the sodium content, etc.). In addition, this reference broadly states that this replacement is made and since

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no specific percentages are defined, it is the examiners position that since the reference fails to mention any specific replacement rate (criticality), this (the absence of any such limitation) constitutes a broad teaching of replacement rates, as long as a final soda-lime batch is obtained. In view of this, it can be reasonably interpreted that the claimed replacement rate is encompassed by the broad teachings according to this reference in the absence of any evidence showing the contrary (criticality). One skilled in the art would have knowledge of the useable replacement rates in view of the teachings according to this reference. The Amrhein et al. reference states that an inorganic nitrate salt can be used and it is the examiners position that this encompasses any inorganic nitrate salt, including the claimed one, because **"a generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".** Although the preferred nitrate is sodium or potassium, **"a reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments"** See *In re Van Marter*, 144 USPQ 421. Since the nitrate is an alkali nitrate, it is the examiners position that one skilled in the art would have found the use of any alkali nitrate obvious in the absence of any evidence showing the contrary (the substitution of one alkali nitrate for another is obvious and well within the level of ordinary skill in the art).

Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Although new grounds of rejections have been applied, the examiner will still comment on applicants remarks with respect to claim 3 and the Amrhein reference.

Applicants state that the amendment to claim 3 (lower limit) distinguishes it over the references. As defined above, this lower limit is new matter.

Applicants argue that the Amrhein reference does not teach the claimed purpose for using the inorganic nitrate (suppressing formation of nickel sulfide). The examiner acknowledges this, but irrespective of the function of the nitrate, it is still known to replace a portion of the salt cake ((mirabilite) with said nitrate, thus reading on the claims. In addition, the instantly claimed invention makes no mention of "suppressing formation of nickel sulfide", as argued. In view of this, the only limitation that must be defined by the reference is the above replacement and this is defined by said reference.

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.**

**"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".**

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Marcheschi whose telephone number is (703) 308-3815. The examiner can normally be reached on Monday through Thursday between the hours of 8:30-6:00 and every other Friday between the hours of 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Mark L. Bell, can be reached at (703) 308-3823.

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Amendments can also be sent by fax to the numbers set forth below:

For after final amendments, the fax number is (703) 872-9311;

For non-final amendments, the fax number is 703 872-9310.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Michael Marcheschi

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5/02



**MICHAEL MARCHESCHI**  
PRIMARY EXAMINER